

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for ~~detecting identifying~~ a CD8⁺ suppressor molecule that has anti-HIV-1 activity, the method comprising:

- (a) contacting a host cell with a replication deficient HIV pseudotyped virus comprising a reporter gene operatively associated with an HIV promoter;
- (b) contacting the host cell with:
 - (i) a sample comprising enriched CD8⁺ cells; or
 - (ii) a sample comprising a cell culture of CD8⁺ cells; or
 - (iii) an extract or media component from (i) or (ii), or fraction thereof; and
- (c) measuring reporter gene activity,

wherein inhibition of reporter gene activity indicates identifies the presence of a CD8⁺ suppressor molecule that has anti-HIV-1 activity.

Claim 2 (original): The method of Claim 1, wherein the reporter gene is expressed during early proviral gene expression.

Claim 3 (original): The method of Claim 2, wherein the reporter gene is expressed in place of an early proviral gene.

Claim 4 (original): The method of Claim 3, wherein the early proviral gene is a *nef* gene.

Claim 5 (original): The method of Claim 1, wherein the pseudotyped virus is an *env* deficient pseudotyped virus.

Claim 6 (original): The method of Claim 5, wherein the pseudotyped virus is produced by a method comprising co-transfected DNA for the pseudotyped virus with a vector that encodes a viral envelope protein.

Claim 7 (original): The method of Claim 6, wherein the viral envelope protein is an HIV Env protein.

Claim 8 (original): The method of Claim 6, wherein the viral envelope protein is a non-HIV viral envelope protein.

Claim 9 (original): The method of Claim 1, wherein the reporter gene is a luciferase gene, a chloramphenicol acetyltransferase gene, a growth hormone gene, or a fluorescent protein gene.

Claim 10 (original): The method of Claim 9, wherein the reporter gene is a luciferase gene.

Claim 11 (currently amended): A method for detecting identifying a CD8⁺ suppressor molecule that has anti-HIV-1 activity, said method comprising:

- (a) contacting a host cell with an *env* deficient HIV pseudotyped virus comprising a reporter gene substituted for an HIV *nef* gene such that said reporter gene is expressed in place of the HIV *nef* gene;
- (b) contacting the host cell with:
 - (i) a sample comprising enriched CD8⁺ cells; or
 - (ii) a sample comprising a cell culture of CD8⁺ cells; or
 - (iii) an extract or media component from (i) or (ii), or fraction thereof; and
- (c) measuring reporter gene activity,

wherein inhibition of reporter gene activity indicates identifies the presence of a CD8⁺ suppressor molecule that has anti-HIV-1 activity.

Claim 12 (original): The method of Claim 11, wherein the reporter gene is a luciferase gene, a chloramphenicol acetyltransferase gene, a growth hormone gene, or a fluorescent protein gene.

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Claim 13 (original): The method of Claim 12, wherein the reporter gene is a luciferase gene.

Claims 14-47 (canceled)

Claim 48 (new): The method of any one of claims 1-13, wherein step (b) and step (c) are performed at one or more time intervals corresponding to one or more stages of the HIV pseudotyped virus life cycle, further wherein inhibition of reporter gene activity during a stage of the virus life cycle indicates antiviral activity of the CD8⁺ suppressor molecule in the stage.